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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,336	08/31/2000	Kenichi Takekawa	196124US2	4688
22850	7590	10/14/2003		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER SHAPIRO, LEONID	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 10/14/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/653,336

Applicant(s)

TAKEKAWA ET AL.

Examiner

Leonid Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 21-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations of the newly introduced independent claim 21: "second threshold value higher than the first threshold value" was not described in the originally filed specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blue et al. (US Patent No. 5,196,835) in view of Marcke (US Patent No. 6,215,116 B1).

As to claim 21, as best understood by examiner, Blue et al. teaches a coordinate input-detecting apparatus including a touch panel to be touched by a pointer, coordinate input-

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detecting apparatus comprising: a substantially flat two-dimensional coordinate input-detecting area configured to receive insertion of the pointer, substantially flat two-dimensional coordinate input-detecting area being formed in front of the touch panel and having a prescribed depth (See Fig. 1-3, items 10, 20,22, in description See Col. 2, Lines 6-12, Col. 4, Lines 55-68, Col. 5, Lines 1-25 and Col. 6, Lines 42-48); an optical unit, configured optically detect the pointer inserted into the coordinate input detecting area and to generate a detection signal based on the detection; and a controller configured to calculate coordinates designated by the pointer in accordance with detection signal (See Fig. 1-3, items 10, 20,22, in description See Col. 2, lines 6-12, Col. 4, Lines 55-68, Col. 5, Lines 1-25 and Col. 6, Lines 42-48).

Blue et al. does not show optical unit recognizes insertion of the pointer when detection signal exceeds a first threshold value, detection allowing a coordinate calculation operation, and wherein controller calculates the coordinates based on a detection signal exceeding a second threshold value higher than a first threshold value.

Marcke shows in "Continuous threshold adjustable proximity detecting device" how to adjust second threshold value grater than the first threshold level (See Fig.6, items 303,310,311,312, in description See Col. 1, Lines 62-67, Col. 2, Lines 1-4 and Col.10, Lines 57-68, Col. 11, Lines 1-10) and teaches that power received by the receiver is inversely proportional forth power of the distance between the object and the emitter /receiver (See Col. 1, Lines 44-52).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use the second threshold and power dependence with a distance shown by Marcke in Blue et al. apparatus and set up the first and second thresholds in accordance with

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distance and calculate first threshold on detection of farthest distance in order to increase range and reliability of device.

As to claims 22-26, as best understood by examiner, Blue et al. teaches about a distance judging device configured to determine a distance between designated device inserted into the predetermined range of the coordinate inputting/detecting area and the optical unit (See Fig. 1, items 10, 20, 22, in description See Col. Col.6, Lines 42-48); wherein the optical detecting means includes plural optical elements (See Fig. 1, items photodetector, lens, in description See Col. 5, Lines 6-8).

Blue et al. does not show the detection signal exceeds the second threshold value when the pointer almost contacts the touch panel and a second threshold unit is determined in accordance with a distance between a point designated by the pointer and optical unit, is set to level enabling the optical device to detect the pointer inserted into a farthest point from optical unit in the coordinate input detecting area.

Marcke teaches that the amplitude for amplified electrical signals and means for increasing the energy levels depend on distance between emitter/receiver an object, and they could be increased or decreased depending on that distance and teaches that power received by the receiver is inversely proportional forth power of the distance between the object and the emitter /receiver (See Col. 1, Lines 44-52).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use this power dependence with a distance which is equivalent to changing threshold value depending on distance (also prescribe the threshold value such that if the designated device is located at a farthest point from the emitter/receiver), as shown by Marcke in

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Blue et al. apparatus and set up the first and second thresholds in accordance with distance and calculate first threshold on detection of farthest distance in order to increase range and reliability of device.

3. Claims 27-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blue et al. and Marcke as aforementioned to claims 21-24 above and in view Fumihiko et al. (JP No.09319501 A).

As to claims 27-30, as best understood by examiner, Blue et al. and Marcke do not teach about first and second optical devices each having a light source and a light acceptance unit, wherein the second threshold value is set and used in comparing with detection signals generated by a the first and second optical units.

Fumihiko et al. shows two optical units installed in adjacent corners (See Drawing 1, items 1-3, k1, k2 and Detailed description, 0007). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use first and second optical units, as shown by Fumihiko et al. in Marcke in Blue et al. device to provide a miniaturized high-reliability detector of simple configuration (See Problem to be solved in Fumihiko et al. reference).

As to claims 31-34, as best understood by examiner, Blue et al., teaches optical units include reflection mirrors each disposed on prescribed sides of the coordinate input-detecting area, reflection mirrors having surfaces whose every portions return light beam to the light source (See Fig. 1, items 10, 12, 16, 18, in description See from Col. 4, Line 55 to Col. 6, Line 32).

Blue et al., and Marcke do not show optical units being disposed at corners on the coordinate input detecting area.

Fumihiko et al. teaches optical units being disposed at corners on the coordinate input detecting area (See Drawing 1, items 1-3, k1, k2 and Detailed description, 0007).

It would have been obvious to one having ordinary skill in the art at the time of the invention to use optical units being disposed at corners on the coordinate input detecting area, as shown by Fumihiko et al. in Marcke in Blue et al. device to provide a miniaturized high-reliability detector of simple configuration (See Problem to be solved in Fumihiko et al. reference).

As to claims 35-38, as best understood by examiner, Blue et al. teaches optical unit further includes a probe light generating device configured to generate and swing and irradiate probe lights toward the reflection mirrors (see fig. 1, items Infrared Laser Diode, 16, 12, in description See from Col. 4, Line 55 to Col. 5, Line 32).

Response to Amendment

4. The amendment filed on 08-08-03 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The limitations of the newly introduced independent claim 21: "second threshold value higher than the first threshold value" was not described in the originally filed specification.

The Applicant' stated in Remarks on page 7, 1st paragraph: "in step S19 a second **higher**

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threshold is utilized for obtaining coordinates of the designated device 4 in coordinate inputting/detecting area 3 (See page 19, Line12). However, neither in step 19 in Fig. 7B, nor in specification this new limitation: "second threshold value higher than the first threshold value" could be found.

Applicant is required to cancel the new matter in the reply to this Office Action.

On page 7, 5-th and 6 paragraphs and in the first three paragraphs on page 8 of the Remarks, the Applicant's stated that Van Marcke reference does not address all limitations of the newly introduced claims. However, Applicant's cannot show non-obviousness by attacking references individually where, as here the rejections are based on combination of references. In re Keller, 208 USPQ 871 (CCPA 1981).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

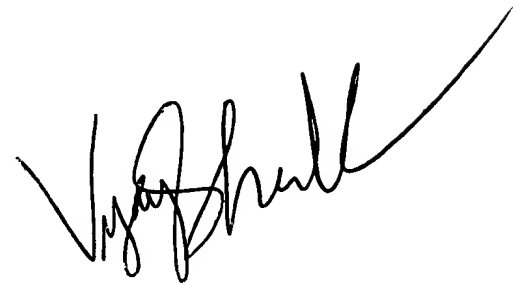
Telephone inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

ls

A handwritten signature in black ink, appearing to read 'Vijay Shankar', with a long, sweeping horizontal stroke extending to the right.

**VIJAY SHANKAR
PRIMARY EXAMINER**